

=====

Sequence Listing was accepted.

If you need help call the Patent Electronic Business Center at (866)
217-9197 (toll free).

Reviewer: Durreshwar Anjum

Timestamp: [year=2009; month=11; day=3; hr=13; min=58; sec=4; ms=498;]

=====

Application No: 09804481

Version No: 2.0

Input Set:

Output Set:

Started: 2009-10-20 18:46:47.743

Finished: 2009-10-20 18:46:49.080

Elapsed: 0 hr(s) 0 min(s) 1 sec(s) 337 ms

Total Warnings: 10

Total Errors: 0

No. of SeqIDs Defined: 11

Actual SeqID Count: 11

Error code	Error Description
W 213	Artificial or Unknown found in <213> in SEQ ID (2)
W 213	Artificial or Unknown found in <213> in SEQ ID (3)
W 213	Artificial or Unknown found in <213> in SEQ ID (4)
W 213	Artificial or Unknown found in <213> in SEQ ID (5)
W 213	Artificial or Unknown found in <213> in SEQ ID (6)
W 213	Artificial or Unknown found in <213> in SEQ ID (7)
W 213	Artificial or Unknown found in <213> in SEQ ID (8)
W 213	Artificial or Unknown found in <213> in SEQ ID (9)
W 213	Artificial or Unknown found in <213> in SEQ ID (10)
W 213	Artificial or Unknown found in <213> in SEQ ID (11)

SEQUENCE LISTING

<110> de Graaf, David
Lander, Eric S.

<120> Novel Small Nuclear RNA Vectors and Uses
Therefor

<130> WIBR-523-101

<140> 09804481

<141> 2001-03-12

<150> 60/188,304

<151> 2000-03-10

<160> 11

<170> FastSEQ for Windows Version 4.0

<210> 1

<211> 4639

<212> DNA

<213> Homo sapiens

<400> 1

```

gacggatcgg gagatctccc gatcccctat ggctcgactct cagtacaatc tgctctgatg 60
ccgcatagtt aagccagtat ctgctccctg cttgtgtgtt ggaggtcgct gagtagtgcg 120
cgagcaaaat ttaagctaca acaaggcaag gcttgaccga caattgagct cggtagcccg 180
ggagatccgg taaggaccag cttctttggg agagaacaga cgcaggggag ggagggaaaa 240
agggagaggg agacgtcact tccccttggc ggctctggca gcagattggc cggttgagtg 300
gcagaaaggg agacggggac tgggcaaggc actgtcgggtg acatcacgga cagggcgact 360
tctatgtaga tgaggcagcg cagaggctgc tgcttcgcca cttgctgctt caccacgaag 420
gagttcccgt gccctgggag cgggttcagg accgctgacg ggaagtgaga atcccagctg 480
tgtgtcaggg ctggaaaggg ctcgggagtg cgcggggcaa gtgaccgtgt gtgtaaagag 540
tgaggcgtat gaggtgtgtt cggggcagag gcccaagatc tcaagggccg ataactgtg 600
taccatcgat tgcaggggag ataccatgat cacgaagggt gttttcccag ggcgaggtt 660
atccattgca ctccggatgt gctgaccctt gcgatttccc caaagcttgg aaactcgact 720
gcataatttg tggtagtggg ggactgcgtt cgcgctttcc cctgacttcc tggagtttca 780
aaagtagact gtacgctaac cggatcctct agagtcgacc tgcaggcatg cagaagacaa 840
ttagcaggca tgctggggat gcggtgggct ctatggcttc tgaggcggaa agaaccagct 900
ggggctctag ggggtatccc cacgcgccct gtacgggcgc attaagcgcg gcgggtgtgg 960
tggttacgcg cagcgtgacc gctacacttg ccagcgccct agcgcccgtt ctttctgctt 1020
tcttcccttc ctttctcgcc acgttcgccc gctttccccg tcaagctcta aatcggggca 1080
tccctttagg gttccgattt agtgctttac ggcacctcga ccccaaaaaa cttgattagg 1140
gtgatgggtc acgtagtggg ccacgcctct gatagacggg ttttcgccct ttgacgttgg 1200
agtccacgtt ctttaatatg ggactcttgt tccaaactgg aacaacactc aaccctatct 1260
cgggtctattc ttttgattta taagggattt tggggatttc ggctatttgg ttaaaaaatg 1320
agctgattta aaaaaaattt aacgcgaatt aattctgtgg aatgtgtgtc agttaggggtg 1380
tggaagtcc ccaggctccc caggcaggca gaagtatgca aagcatgcat ctcaattagt 1440
cagcaaccag gtgtggaaag tccccaggct cccagcaggc cagaagtatg caaagcatgc 1500
atctcaatta gtcagcaacc atagtccgcg ccctaactcc gcccatcccg cccctaactc 1560
cgcccgattc cgccattctc ccgccccatg gctgactaat tttttttatt tatgcagagg 1620
ccgaggccgc ctctgcctct gagctattcc agaagtagtg aggaggcttt tttggaggcc 1680
taggcttttg caaaaagctc ccgggagctt gtatatccat tttcgatct gatcagcacg 1740

```

tgttgacaat	taatcatcgg	catagtatat	cggcatagta	taatacgaca	aggtgaggaa	1800
ctaaaccatg	gccaagttga	ccagtgccgt	tccggtgctc	accgcgcgcg	acgtcgccgg	1860
agcggtcgag	ttctggaccg	accggctcgg	gttctcccg	gacttcgtgg	aggacgactt	1920
cgccggtgtg	gtccgggacg	acgtgaccct	gttcatcagc	gcggtccagg	accaggtggt	1980
gccggacaac	accctggcct	gggtgtgggt	gcgcggcctg	gacgagctgt	acgccgagtg	2040
gtcggaggtc	gtgtccacga	acttccggga	cgctccggg	ccggccatga	ccgagatcgg	2100
cgagcagccg	tgggggcggg	agttcgccct	gcgcgacccg	gccggcaact	gcgtgcactt	2160
cgtggccgag	gagcaggact	gacacgtgct	acgagatttc	gattccaccg	ccgccttcta	2220
tgaaaggttg	ggcttcggaa	tcgttttccg	ggacgcgggc	tggatgatcc	tccagcgcgg	2280
ggatctcatg	ctggagttct	tgcgccaccc	caacttgttt	attgcagctt	ataatggtta	2340
caaataaagc	aatagcatca	caaatttcac	aaataaagca	tttttttcac	tgcattctag	2400
ttgtggtttg	tccaaactca	tcaatgtatc	ttatcatgtc	tgtataccgt	cgacctctag	2460
ctagagcttg	gcgtaatcat	ggtcatagct	gtttcctgtg	tgaatttgtt	atccgctcac	2520
aattccacac	aacatacgag	ccggaagcat	aaagtgtaaa	gcctggggtg	cctaatagag	2580
gagctaactc	acattaattg	cgttgcgctc	actgcccgct	ttccagtcgg	gaaacctgtc	2640
gtgccagctg	cattaatgaa	tgcggcaacg	cgcggggaga	ggcggtttgc	gtattgggcg	2700
ctcttcgct	tcctcgctca	ctgactcgct	gcgctcggtc	gttcggtgc	ggcgagcggg	2760
atcagctcac	tcaaaggcgg	taatacgggt	atccacagaa	tcaggggata	acgcaggaaa	2820
gaacatgtga	gcaaaaggcc	agcaaaaggc	caggaaaccgt	aaaaaggccg	cgttgctggc	2880
gtttttccat	aggtcccgcc	cccctgacga	gcatacaaaa	aatcgacgct	caagtcagag	2940
gtggcgaaac	ccgacaggac	tataaagata	ccaggcggtt	ccccctggaa	gctccctcgt	3000
gcgctctcct	gttccgaccc	tgcgcgttac	cggataacctg	tccgcctttc	tccttcggg	3060
aagcgtggcg	ctttctcaat	gctcacgctg	taggtatctc	agttcggtgt	aggtcgttcg	3120
ctccaagctg	ggetgtgtgc	acgaaccccc	cgttcagccc	gaccgctgcg	ccttatccgg	3180
taactatcgt	cttgagtcca	acccggtaag	acacgactta	tcgccactgg	cagcagccac	3240
tggtaacagg	attagcagag	cgaggatatgt	aggcggtgct	acagagttct	tgaagtgggtg	3300
gcctaactac	ggctacacta	gaaggacagt	atttggtatc	tgcgctctgc	tgaagccagt	3360
taccttcgga	aaaagagttg	gtagctcttg	atccggcaaa	caaaccaccg	ctggtagcgg	3420
tggttttttt	gtttgcaagc	agcagattac	gcgcagaaaa	aaaggatctc	aagaagatcc	3480
tttgatcttt	tctacggggg	ctgacgctca	gtggaacgaa	aactcacgtt	aagggaatttt	3540
ggatcatgaga	ttatcaaaaa	ggatcttcac	ctagatcctt	ttaaattaaa	aatgaagttt	3600
taaatcaatc	taaagtatat	atgagtaaac	ttggtctgac	agttaccaat	gcttaatcag	3660
tgaggcacct	atctcagcga	tctgtctatt	tcgttcatcc	atagttgcct	gactccccgt	3720
cgtgtagata	actacgatac	gggagggctt	accatctggc	cccagtgtcg	caatgatacc	3780
gcgagaccga	cgctcacccg	ctccagattt	atcagcaata	aaccagccag	ccggaagggc	3840
cgagcgcaga	agtggctcctg	caactttatc	cgctccatc	cagtctatta	attgttgccg	3900
ggaagctaga	gtaagtagtt	cgccagttaa	tagtttgccg	aacgttggtg	ccattgctac	3960
aggcatcgtg	gtgtcacgct	cgtcgtttg	tatggcttca	ttcagctccg	gttcccaacg	4020
atcaaggcga	gttacatgat	cccccatgtt	gtgcaaaaaa	gcggttagct	ccttcggtcc	4080
tccgatcgtt	gtcagaagta	agttggccgc	agtgttatca	ctcatggtta	tggcagcact	4140
gcataattct	cttactgtca	tgccatccgt	aagatgcttt	tctgtgactg	gtgagtactc	4200
aaccaagtca	ttctgagaat	agtgtatgcg	gcgaccgagt	tgctcttgcc	cggcgtcaat	4260
acgggataat	accgcgccac	atagcagaac	tttaaaagtg	ctcatcattg	gaaaacgttc	4320
ttcggggcga	aaactctcaa	ggatcttacc	gctgttgaga	tccagttcga	tgtaacccac	4380
tcgtgcaccc	aactgatctt	cagcatcttt	tactttcacc	agcgtttctg	ggtgagcaaa	4440
aacaggaagg	caaaatgccg	caaaaaagg	aataagggcg	acacggaaat	gttgaatact	4500
catactcttc	ctttttcaat	attattgaag	catttatcag	ggttattgtc	tcatgagcgg	4560
atacatattt	gaatgtattt	agaaaaataa	acaaataggg	gttccgcgca	catttccccg	4620
aaaagtgccca	cctgacgtc					4639

<210> 2

<211> 5

<212> DNA

<213> Artificial Sequence

<220>

<223> single-stranded restriction fragment overhang

<400> 2
 gcagg 5

<210> 3
 <211> 5
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> single-stranded restriction fragment overhang

<400> 3
 tgaga 5

<210> 4
 <211> 33
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> recognition site

<220>
 <221> misc_feature
 <222> 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 13, 14, 15, 16, 22, 23, 24,
 25, 26, 27, 28, 29, 30, 31, 32, 33
 <223> n = A,T,C or G

<400> 4
 nnnnnnnnnn acnnnngtay cnnnnnnnnn nnn 33

<210> 5
 <211> 33
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> recognition site

<220>
 <221> misc_feature
 <222> 1, 2, 3, 4, 5, 6, 7, 13, 14, 15, 16, 19, 20, 21, 22, 23, 24,
 25, 26, 27, 28, 29, 30, 31, 32, 33
 <223> n = A,T,C or G

<400> 5
 nnnnnnngrt acnnnngtnn nnnnnnnnnn nnn 33

<210> 6
 <211> 10
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> modification fragment

<400> 6	
cacaaacaca	10
<210> 7	
<211> 12	
<212> DNA	
<213> Artificial Sequence	
<220>	
<223> modification fragment	
<400> 7	
tccacaaaca ca	12
<210> 8	
<211> 15	
<212> DNA	
<213> Artificial Sequence	
<220>	
<223> modification fragment	
<400> 8	
tcgtccacaa acaca	15
<210> 9	
<211> 12	
<212> DNA	
<213> Artificial Sequence	
<220>	
<223> modification fragment	
<400> 9	
cacaaacaca ac	12
<210> 10	
<211> 10	
<212> DNA	
<213> Artificial Sequence	
<220>	
<223> modification fragment	
<400> 10	
cacaaacacg	10
<210> 11	
<211> 59	
<212> DNA	
<213> Artificial Sequence	
<220>	
<223> vector construct	
<400> 11	
ggcccaagat ctcaagggcc cataacatgt gtaccatcga ttgcagggga gataccatg	59

